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(71)Applicant: **KYOTO DAIICHI KAGAKU:KK**

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**YAMAO YASUO**  
**TAKAHASHI YOSHINORI**

**(54)METHOD AND IMPLEMENT FOR ANALYSIS  
OF UREA**

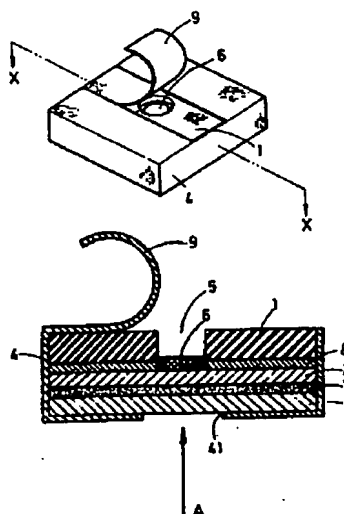
**(57)Abstract:**

**PURPOSE:** To detect the urea in body fluid quickly and accurately irrespectively of the kinds of sample liquid by hydrolyzing the urea in the sample to gaseous ammonia with an enzyme system exhibiting urease activity and conducting said ammonia to an indicator layer.

**CONSTITUTION:** A self-adhesive tape as a sealer 9 is stripped along scores, and a sample is dropped onto a tablet 6 consisting of an absorptive carrier contained in a sample hole 5. The hole is immediately sealed tightly with the self-adhesive tape. The absorptive carrier absorbs the reagent and the urea in the sample is hydrolyzed to gaseous ammonia by the urease impregnated beforehand in the absorptive carrier. The gaseous ammonia and steam generated by the hydrolysis pass through a gas permeable membrane 2. The gaseous ammonia contacts with a reagent layer 7 provided on the transparent carrier 3 in succession, then the layer 7 discolors in

accordance with the fluctuations in pH by the gaseous ammonia. Thus if the discoloration of the layer 7 is measured through a hole 41 for measuring window provided in a single-coated self-adhesive tape 4, the quantity of the urea in the sample is measured.

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